REMARKS

Applicant respectfully requests reconsideration of this application in view of the foregoing amendment and following remarks.

A. Status of the Claims & Explanation of Amendments

Claims 1-40 were pending in this application. By this amendment, claims 1, 13, 19, 20, 24 and 35-40 have been amended. Independent claims 13, 24 and 36-37 and 39-40 have been amended to recite a controller or method to stop an operation of writing the control signal into one of the separate regions of the storage area when an instruction to initiate the function of reading is received. Support for the amendment may be found, for example, at page 27, lines 1-5 of the original specification. No new matter has been added by this Amendment.

B. Objections

Applicant respectfully requests withdrawal of the objection to Figures 8 and 9, which have now been labeled –Prior Art– as requested. Applicant also requests withdrawal of the objection to claims 19 and 20, which were objected to because of an alleged lack of antecedent basis for the term "said storage area." Each of claims 19 and 20 is amended to provide proper antecedent basis.

C. Rejection under 35 U.S.C. § 112

The Office Action rejects claim 36 under 35 U.S.C. § 112, ¶2 because of an alleged insufficient antecedent basis for the term "the storage area." This rejection is now moot

as claim 36 has been amended to read "A method of controlling an image sensing apparatus having an image sensor with a storage area." This amendment was not made for any substantial reason related to patentability (*i.e.*, §§ 102 or 103). Reconsideration and withdrawn of the rejection of claim 36 is respectfully requested.

D. Rejections under 35 U.S.C. § 102

In the Office Action, claims 1, 3, 4, 6-15, 17-26 and 28-37 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 5,943,094 to Sakai et al. ("Sakai"). In addition, claims 1, 2, 5, 13-16, 24, 25, 27 and 35-40 were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. Patent No. 6,046,771 to Horii ("Horii"). These rejections are respectfully traversed because these references do not teach, disclose or suggest all the elements of these claims as required. *See* MPEP § 2131 at 2100-70 (anticipation requires showing of all elements in single reference).

1. *Claims 1-12, 35 and 38 Are Patentably Distinct From Sakai and Horii*

Independent claim 1 recites, *inter alia*, "the signal to be stored in the storage area is generated by said image sensor when a button is pressed halfway, and an object is photographed when designation of photographing of the object is initiated in accordance with operation of the release button."

Sakii is directed to an image pickup device with noise data generation. The Office Action alleges that a storage unit (8, 81, 82) of Sakai is adapted to store a first signal (noise or

dark signal) generated by an image sensor (3) and cited Figure 2, and col. 5, lines 11-49. See 11/6/03 Office Action at p. 3.

That portion of Sakii explains:

> [A] subject image is taken and stored in the memory 8 in the manner like the first embodiment. Thereafter, noise components picked up at the first cycle are stored in the memory 81 and then transferred to the memory 82 during the second cycle.
> (Col. 5, lns. 16-20).

Thus, Sakii discloses that the signal is stored only after the image of the subject is taken and stored in the memory. Accordingly, Sakii fails to teach, disclose or suggest "the signal to be stored in the storage area is generated by said image sensor when a button is pressed halfway, and an object is photographed when designation of photographing of the object is initiated in accordance with operation of the release button" as recited in Applicants' claim 1.

Horii is directed to an image sensing apparatus. In the Office Action is it alleged that a storage unit (16) is adapted to store a first signal generated by an image sensor, and that first signal is a signal for correcting a second signal generated when the image sensor photographs an object. *See* 11/6/03 Office Action at p. 8 (citing Figs. 1 & 2 and col. 3, lines 16-23 for support). That passage discloses:

> A first memory 16 which stores the image signal outputted by the image sensor 10 is arranged, in this case, to serve as a noise memory for storing a noise component of the image signal from the image sensor 10. A first memory controller 17 is arranged to control the noise memory 16. An arithmetic

> element 18 is arranged to remove the noise component stored in the memory 16 by subtracting the noise component from the image signal outputted by the image sensor 10.

Accordingly, Horri – like Sakai – fails to teach, disclose or suggest "the signal to be stored in the storage area is generated by said image sensor when a button is pressed halfway, and an object is photographed when designation of photographing of the object is initiated in accordance with operation of the release button" as recited in Applicants' claim 1.

For at least these reasons, independent claim 1 is respectfully asserted to be patentably distinct from Sakai and Horii. For at least similar reasons, dependent claims 2-12 and independent claims 35 ("the control signal . . . is generated by the image sensor when a button is pressed halfway, and an object is photographed when designation of photographing of the object is initiated in accordance with operation of the release button") and 38 ("a signal . . . is generated by the image sensor when a button is pressed halfway, and an object is photographed when designation of photographing of the object is initiated in accordance with operation of the release button") are also respectfully asserted to be patentably distinct from Sakai and Horii.

2. *Claims 13-34, 36-37 and 39-40 Are Patentably Distinct From Sakai and Horii*

Applicant's claim 13 recites, *inter alia*, "a control unit adapted to stop writing the first signal generated by said image sensor into said storage unit when designation of photographing of an object is initiated." With this feature, it is unnecessary to wait for the start of actual photographing until the next dark current noise component is completely stored in the

memory even if the writing operation is in progress when the image sensing is instructed to start the actual photographing. *See, e.g.*, pg. 28, ln. 25 – pg. 25, ln. 5. Respectfully, this feature is not shown in either Sakai or Horii.

Sakai discloses an image pickup device with noise data generation in which the image is controlled in accordance with various factors such as the temperature of the image sensor and a signal accumulation time of the image sensor etc. In rejecting claim 13, the Office Action cited col. 5, lines 16-20 of Sakai indicating that a subject image is taken and stored in the memory before taking and storing the noise signal into the memory. Applicant understand the Office Action to allege that if the subject image is taken before taking the noise signal, a priority is given to the subject image over the noise signal. Accordingly, Sakai fails to teach, disclose or suggest "a control unit adapted to stop writing the first signal generated by said image sensor into said storage unit when designation of photographing of an object is initiated" as recited in Applicant's claim 13.

Horii discloses an image sensing apparatus capable of storing the noise without causing any discontinuance of mages even while an image pickup operation is in process. The Horii's image sensing apparatus has a first storage means for the image signal and a second storage means for the noise signal. The Office Action cites col. 4, lines 19-21 of Horii indicating that "wherein the dark current noise extracting mode is optional, implying that designation of photographing of an object image has a higher priority over the dark current noise extracting mode." Horii, however, fails to show or suggest "a control unit adapted to stop writing the first

signal generated by said image sensor into said storage unit when designation of photographing of an object is initiated" as recited in Applicant's claim 13.

For at least these reasons, independent claim 13 is respectfully asserted to be patentably distinct from Sakai and Horii. For at least similar reasons, independent claims 24 ("a control unit adapted to stop an operation of acquiring the first signal generated by said image sensor when designation of photographing of an object image is initiated," 36 ("controlling to stop writing the first signal generated by the image sensor into the storage area when designation of photographing of an object image is initiated"), 37 ("controlling to stop acquiring the first signal generated by the image sensor when designation of obtaining the second signal is initiated"), 39 ("controlling to stop writing the first signal generated by the image sensor into the storage area when designation of photographing of an object image is initiated"), 40 ("controlling to stop acquiring the first signal generated by the image sensor when designation of obtaining the second signal is initiated") and dependent claims 14-23 and 25-34 are also respectfully asserted to be patentably distinct from Sakai and Horii.

Applicant has not individually addressed the rejections of the dependent claims because Applicants submit that the independent claims from which they respectively depend are in condition for allowance as set forth above. Applicant however reserves the right to address such rejections of the dependent claims should such be necessary.

CONCLUSION

For the above-stated reasons, this application is respectfully asserted to be in condition for allowance. An early and favorable examination on the merits is requested. In the event that a telephone conference would facilitate the examination of this application in any way, the Examiner is invited to contact the undersigned at the number provided.

THE COMMISSIONER IS HEREBY AUTHORIZED TO CHARGE ANY ADDITIONAL FEES WHICH MAY BE REQUIRED FOR THE TIMELY CONSIDERATION OF THIS AMENDMENT UNDER 37 C.F.R. §§ 1.16 AND 1.17, OR CREDIT ANY OVERPAYMENT TO DEPOSIT ACCOUNT NO. 13-4500, ORDER NO. 1232-4735.

Respectfully submitted,
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Dated: February 6, 2004

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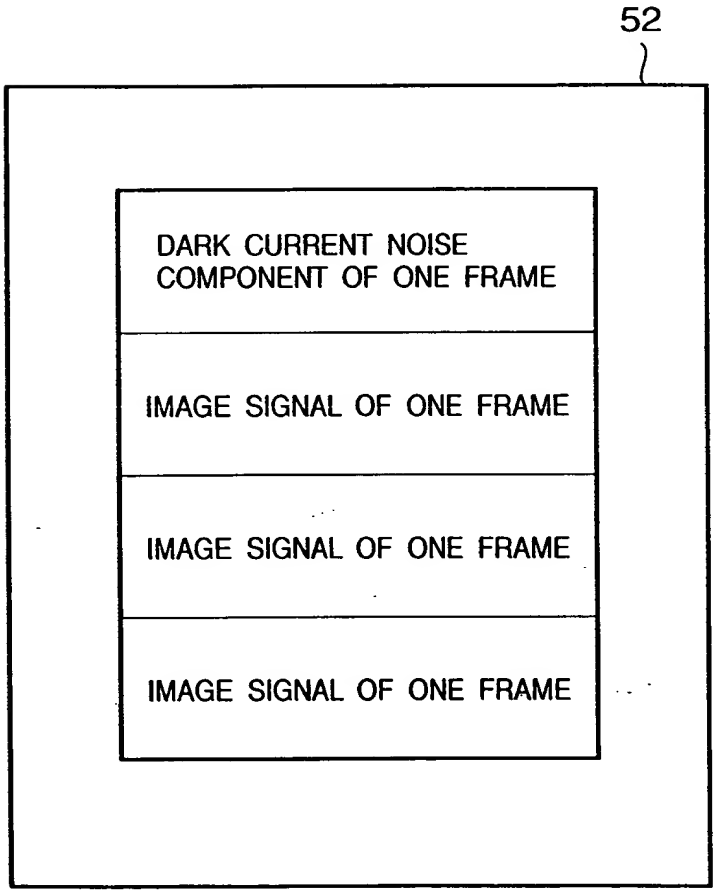
FIG. 9



PRIOR ART

FIG. 8